

Supporting Document A

(Revised & updated: 6/30/06)

Upper Swift Creek Plan Amendment Existing Conditions and Issues

A. Plan Boundaries (Map A)

The boundaries of the Upper Swift Creek Area Plan are the Route 288 Corridor Plan to the north, the Southern and Western Area Plan and Central Area Plan to the south, Powhite/Route 288 Area Plan to the east, and Powhatan County to the west. A small portion of the adopted Upper Swift Creek Plan lies north of Midlothian Turnpike and east of Route 288, and is physically separated from the bulk of the Upper Swift Creek Plan by the Route 288 Corridor Plan.

B. Magisterial Districts

The Upper Swift Creek Plan lies within the Matoaca Magisterial District (about 82 percent of the study area geography), within the Clover Hill Magisterial District (about 14 percent of the study area geography), and within the Midlothian Magisterial District (about 4 percent of the study area geography).

C. Plan Status (Map A)

The study area of this plan amendment includes most of the geography of the current Upper Swift Creek Plan (adopted in 1991). That small portion of the 1991 plan physically separated from the study area by the Route 288 Corridor Plan is not included in the geography of this plan amendment, but will be included in the Robious Area Plan amendment currently under review. The study area includes the majority of the Upper Swift Creek watershed within the jurisdiction of Chesterfield County. The geography of the plan amendment is approximately 57 square miles in area, comprising approximately 13 percent of the land area of the county.

D. Existing Zoning and Land Use Patterns (Maps B and C)

Existing zoning and land use patterns within the study area reflect predominantly a mix of residential and agricultural zoning and uses. Most of the area's commercial zoning and uses are located along Rt. 360. Rt. 360 provides a major east/west vehicular access, linking the study area with the rest of the county to the east and with Amelia County to the west. Route 288 provides a major north/south vehicular access, linking the study area with the rest of the county to the north and south as well as access to Powhatan and Henrico Counties to the north. Powhite Parkway provides additional major vehicular access to the northeast portions of Chesterfield County and to the City of Richmond. Planned improvements to Powhite Parkway will further enhance vehicular access between the study area and the surrounding region.

As noted herein, the study area includes the majority of the Upper Swift Creek Watershed that lies within the jurisdiction of Chesterfield County. This watershed supplies Swift Creek Reservoir,

currently a significant source of drinking water for the county and a major amenity for area residents.

As suggested in Table I, as of December 31, 2005, approximately 47 percent of the study area was zoned agriculturally, of which 61 percent had minimal improvements. Residential zoning accounted for approximately 46 percent of the land within the study area, of which 67 percent was minimally improved. Office, commercial and industrial zoning accounted for about 7 percent of the area, of which three-quarters had yet to be developed.

Residential zoning within the study area, as a percentage of overall zoning, is higher than the countywide average (46 percent for the study area compared to 34 percent countywide). The overall density for residential development is about the same as that for residential development in the county as a whole (see Table II).

The study area includes existing and planned residential neighborhoods of varying ages and character, including: single family residences (including mobile homes) on acreage parcels; single family residences in subdivisions; townhouse subdivisions; and multi-family dwellings (see Table II).

An examination of land use data identified 15,668 dwelling units within the study area as of December 2005. The 2005 data also suggests that there was enough vacant land already zoned for residential use within the study area to permit the development of an additional 14,000 dwellings. Under the current adopted plan, 13,500 more dwellings could also potentially be built on agriculturally zoned vacant land recommended by the plan for residential development. It is further estimated that 7,200 dwellings could be built on existing underutilized land (parcels greater than 5 acres currently occupied by one dwelling, but either residentially zoned or recommended by the plan for residential development), for a potential adopted plan build-out total of about 50,400 dwellings (a 222 percent increase over the number of dwellings in 2005). Analysis of the proposed Upper Swift Creek Plan, projects a total of 40,200 dwellings by plan build-out, not including any subsequent development in the recommended deferred growth area.

Significant public/semi public uses within the study area include Horner Park and Clover Hill Library. Public schools and associated facilities include: Alberta Smith, Clover Hill, Spring Run, Swift Creek, and Woolridge Elementary Schools; Swift Creek Middle School; and Clover Hill High School. Fire stations include Clover Hill and Swift Creek Fire Stations and Manchester Volunteer Station. Other semi-public uses include area churches, a private school (Millwood School), and golf courses. Swift Creek Reservoir provides a visual amenity to the public. However, access to the Reservoir for recreational purposes is restricted and generally not available to the public at large.

E. Demographic Information

The following information comes from 2000 Census data and Chesterfield County's land use database for 2005 (through December 31, 2005), together with additional information on population and housing gathered from county assessment records and studies.

1. Population

A review of Chesterfield County's Land Use database for 2005 suggests that the number of people living in the study area increased between January 1, 1994 and December 31, 2005, from approximately 27,900 to approximately 40,300, or an increase of about 44 percent (see Table III). Estimates of countywide population growth for the same time period indicate that county population grew by about 32 percent. Comparing these figures suggests that the study area population grew at a rate one-third faster than the county as a whole. Most of this population growth has occurred in new subdivisions developing west of Woodlake and south of the Rt. 360 commercial corridor, as new households continue to move into the area.

The study area population estimate represents approximately 13 percent of the county's estimated total population for 2005. Given that the study area includes approximately 13 percent of the area of the county, the population density of the study area is comparable to that for the county as a whole.

2. Household Income

The 2000 Census year estimated household income for census tracts that encompass the study area was approximately \$71,682, or approximately 122 percent of the Chesterfield County average of \$58,537 for the 2000 Census year.

3. Housing

The study area has a mix of older and newer neighborhoods and a mix of housing types. Table II gives a summary of housing types. The average assessment of single-family residences in 2005 was \$201,884, compared to a county average of \$175,488. Of such housing type, about 92 percent were estimated to be owner occupied, compared to a county average estimate of 89 percent. The average age of residences was estimated to be about 16 years, compared to a county average of 24 years.

4. Residential Development Patterns (Map C)

Residential development within the study area is characterized primarily by single-family residences on acreage parcels, by single-family and townhouse residences in subdivisions, and by apartments and condominiums in multi-family complexes. The following generally summarizes residential development within the study area:

- Single-family residences on acreage parcels front most of the arterial roads in the western and southern fringes of the study area.
- Single-family and townhouse residences in subdivisions include a mix of older and newer neighborhoods, with most new single-family subdivisions developing west of Woodlake and south of the Rt. 360 commercial corridor.
- Several multi-family complexes are within the study area. These are primarily located along, or in proximity to Rt. 360, and within, and north of, Brandermill and Woodlake.

F. Commercial Development Pattern (Map C)

Commercial uses within the study area consist primarily of businesses on parcels fronting Rt. 360, with a significant node of commercial, office and industrial development in the vicinity of the Gentio Road/Old Hundred Road intersection.

G. Employment and Jobs

In the second quarter of 2003, approximately 19,448 employed persons resided in the study area. During the same period area businesses generated approximately 7,182 jobs. These estimates suggest the study area is a net exporter of workers, by a ratio of about 2.7 workers living in the area per job within the area.

H. Tax Revenue

It is difficult to obtain information about tax revenue generated for specific geographies of the county. However, a review of county assessment data for land and improvements (December 31, 2005) suggests that the study area is a net generator of real estate tax revenue. Specifically, county assessment records indicate that land and improvements within the study area account for approximately 15 percent of total assessed taxable value countywide. As noted herein, the population of the study area is approximately 13 percent of countywide population estimates. These estimates suggest that the study area generates slightly more per-capita real estate tax revenue than that generated countywide.

A further analysis of real estate assessment records suggests that approximately nine percent of the county's assessed value for all office, commercial and industrial improvements (exclusive of land value) are located in the study area. This might suggest that nine percent of the office, commercial and industrial development of the county is located in the study area, which, as noted herein, includes 13 percent of the county's land area and 13 percent of the county's population.

I. Environmental Features

As noted herein, the study area includes most of the Upper Swift Creek Watershed and Swift Creek Reservoir. The Swift Creek Reservoir is approximately 1700 acres in surface area and serves as a source of water for Chesterfield County citizens. The reservoir also supports fish and other aquatic life. In addition to the reservoir, there are tributary streams and adjacent wetlands in the study area. There are also non-tidal wetlands throughout the study area that are not associated with any of the streams or the reservoir.

The complex of streams and wetlands in the watershed provide wildlife habitat, support aquatic life, serve as a recreational resource and add to the aesthetics of the study area. The tributary streams also have floodplains and Resource Protection Areas (RPAs) adjacent to them (approximately 14 percent of the study area). The floodplains and RPAs protect the streams by filtering out pollutants in stormwater runoff. These areas are identified in the Water Quality Protection Plan as environmentally sensitive features, and land uses and activities within them are limited by county ordinance. Additional environmentally sensitive areas may exist in the study area; however, these areas have not yet been calculated. Further analysis of these features would occur with new development.

The study area is generally characterized by flat to gently rolling topography typical of the Piedmont and Triassic physiographic regions. Soils in the area can be characterized as moderately to well drained. There are some areas, however, that have clayey or hydric soils, which do not drain well. Significant slopes and erodible soil conditions exist along some stream banks.

J. Utilities

Public Water and Wastewater Service

The area encompassed by the Upper Swift Creek Plan amendment is supported by public water and wastewater infrastructure that has been planned to accommodate future growth while maintaining quality service for existing residential, commercial and industrial areas.

Water System

The County's public water system is an interconnected system which draws treated water from three sources: the Swift Creek Reservoir, the City of Richmond, and the Appomattox River Water Authority (ARWA) at Lake Chesdin. While the amount of water taken from Swift Creek Reservoir is anticipated to remain at a constant rate, existing long-term contracts with the City of Richmond and the ARWA insure that sufficient water will be available to meet the domestic and fire protection demands of future as well as existing development in the Upper Swift Creek watershed. The existing water system consists of transmission and distribution lines, booster pump stations and elevated storage tanks.

The County's Water and Wastewater Facilities Plan reflects that development in the upper portion of the Upper Swift Creek Plan amendment area will be served by water line extensions from an existing 24" line along Rt. 60, and by the existing Huguenot Springs and Midlothian tanks. Water lines will need to be constructed along Old Hundred Road, Otterdale Road north of Genito Road, and Mt. Hermon Road. Development in the central and lower portion of the Plan area will be served by extensions from existing 24" lines along Rt. 360 and Spring Run Road, by existing 16" lines along Winterpock Road, Genito Road and Woolridge Road, and by the existing Clover Hill and Physic Hill tanks. Water lines will need to be constructed along Rt. 360 west of Hampton Park Boulevard, DuVal Road, and Genito Road west of Otterdale Road. It is anticipated that those lines will be constructed by private developers.

The County's Water and Wastewater Facilities Plan reflects a future water tank west of Otterdale Road, between DuVal Road and Genito Road, and on Rt. 360 in the vicinity of Grange Hall elementary school. The Water and Wastewater Facilities Plan also reflects future construction of the "Southwest Corridor Transmission Line", which will begin at the ARWA treatment plant at Lake Chesdin, follow River Road to Riverway Road, run along Riverway Road to Beach Road, run east along Beach Road to the future Otterdale Road Extended, run along Otterdale Road Extended through the Southern Land Sales tract, and connect to a future water line along Rt. 360, west of Winterpock Road. This transmission line, along with two new pump stations and a ground storage tank, will move water from the ARWA facility into the western Rt. 360 corridor, will feed the future "Grange Hall" tank, and will support existing development as well as future growth reflected by the Upper Swift Creek Plan.

Wastewater System

The "backbone" of the public wastewater system that serves the Upper Swift Creek Plan area is the Upper Swift Creek Transport System, which was completed in 1990. This facility includes a 60" diameter trunk along Genito Road at the upper end of Swift Creek Reservoir, the Upper Swift Creek Wastewater Pump Station located north of Genito Road at the mouth of Little Tomahawk Creek, and dual force mains which convey wastewater east to the Bailey's Bridge Road Wastewater Pump Station. At the present time a single force main conveys wastewater from that location east to the Proctors Creek Wastewater Treatment Plant. The County's Water and Wastewater Facilities Plan includes future expansion of the Upper Swift Creek pump station, replacement of the Bailey's Bridge Road pump station with a much larger facility, and construction of two additional force mains to convey wastewater to the treatment plant. Construction of the new Bailey's Bridge Road pump station and the additional force mains began in early 2004 and completion is projected for late 2005. These system upgrades will insure that adequate capacity will be available in the downstream facilities to support future growth reflected by the Upper Swift Creek Plan.

The Water and Wastewater Facilities Plan reflects future large wastewater lines that will be necessary along Swift Creek, Tomahawk Creek, Otterdale Creek, Horsepen Creek, and Blackman Creek. Extensions of existing wastewater lines along West Branch Creek, Spring Run Creek, Dry Creek, and Fuqua Branch Creek will also be needed. It is anticipated that those lines will be constructed by private developers.

The Upper Swift Creek Transport System was designed and constructed to support future development in the Upper Swift Creek watershed based on the higher land use densities as reflected in the Powhite/Route 288 Development Area Plan, which predates the Upper Swift Creek Plan. With adoption of the Upper Swift Creek Plan in 1991, and the subsequent plan amendment in 2000, significantly lower residential development densities were recommended, which have been consistently followed for developments approved by the County over the past thirteen years. These lower densities have made available a limited amount of system capacity within the Upper Swift Creek Transport System, which is not anticipated to be utilized by development within the Upper Swift Creek watershed. Future extensions of wastewater lines needed for development of the Magnolia Green site will be oversized to include that additional capacity. Future lines constructed within Magnolia Green, along Blackman Creek and its tributaries, will also be oversized to include the additional capacity, and will provide access points for a very limited area along the south side of Rt. 360, at the southeast and southwest quadrants of the future Powhite Parkway interchange. This area is in the upper end of the Appomattox River watershed. Development in this limited area would require the construction of one or two strategically placed pump stations, with force mains extending across Rt. 360, in order to access the public wastewater system and utilize that additional system capacity.

Creation of Water and Wastewater Assessment Districts

The County does not have funds appropriated for the extension of public water and wastewater service into areas of existing development. Since 1989 the County's policy to address requests for service has been to pursue the creation of "assessment districts". If the majority of property owners in a specific area desire public water and/or wastewater service the Board of Supervisors may hold a public hearing, and consider the creation of an assessment district. If approved, the Board will appropriate the funds for that specific project and all owners, whose property abut the utility line, will be assessed a share of the total project costs as a means of reimbursing the County. The assessment will be recorded as a lien on the property, and the owners can pay the assessment in one lump sum payment, or choose bi-annual payments for up to a 20-year period. Property owners aged 65 years or older who occupy a dwelling on their property may request that their assessment payments be deferred until such time as the dwelling is no longer occupied by an owner aged 65 or older, or is sold or otherwise conveyed to another person. At that time the suspension of payments would cease, and the entire assessment, plus any accrued interest would be due.

K. Police Service

There is a temporary police precinct serving the area. It is anticipated that this facility will become permanent by 2007 – 2008. The need for additional police service facilities is addressed in the Public Facilities Plan, which was updated in 2004.

L. Fire Service

There are two fire stations and one volunteer station within the study area. The need for additional fire service facilities is addressed in the Public Facilities Plan, which was updated in 2004.

M. Schools

The study area lies within the Alberta Smith, Clover Hill, Evergreen, Grange Hall, Spring Run, Swift Creek, Watkins and Woolridge Elementary School zones, the Bailey Bridge, Midlothian and Swift Creek Middle School Zones, and the Clover Hill, Manchester and Midlothian High School zones. Cosby High School is scheduled to open in 2006 – 2007. The need for additional school facilities is addressed in the Public Facilities Plan, which was updated in 2004.

N. Libraries

The study area is served by the Clover Hill and Midlothian Libraries. The need for additional library facilities is addressed in the Public Facilities Plan, which was updated in 2004.

O. Parks and Recreation

Horner Park and the Clover Hill Athletic Facility are located within the study area. The need for additional park facilities is addressed in the Parks and Recreation Master Plan and Public Facility Plan, which was updated in 2004.

P. Transportation

Route 360 provides the major east/west vehicular access route in the study area, linking the area with the rest of the county to the east and with Amelia County to the west. Route 288 provides the major north/south vehicular access route in the study area, linking the study area with the rest of the county to the north and south, and also provides major vehicular access to Powhatan and Henrico Counties to the north. Powwhite Parkway provides additional major vehicular access to the northeast areas of Chesterfield County and to the City of Richmond. Planned improvements to Powwhite Parkway will further enhance vehicular access between the study area and the surrounding region.

Continued development in the western portions of the county is putting pressure on the existing road network to accommodate increased traffic from new residents and businesses moving into the area.

Roads in the western part of the Upper Swift Creek Plan area mainly consist of substandard two-lane roads (ie. pavement width less than 24 feet, with shoulders of less than 2 feet in width). Most of these roads are currently carrying relatively low volumes of traffic. Sections of Genito Road, Woolridge Road, Mount Hermon Road, Duval Road, Otterdale Road, Hallsboro Road, and County Line Road are narrow, with no shoulders, and poor vertical and horizontal alignments. Based on the most recently available traffic counts, most of these roads are carrying less than 2,000 vehicles per day.

In the eastern part of the plan area, substandard two-lane roads are carrying significantly higher volumes of traffic. Bailey Bridge Road in the vicinity of Manchester High School and Bailey Bridge Middle School currently carries approximately 8,700 vehicles per day. Genito Road east of Woolridge Road carries 13,605, Woolridge Road carries 10,800 over the Swift Creek reservoir, and Old Hundred Road north of Millridge Parkway carries 11,135. These volumes approach or exceed the capacity of these facilities.

The following Tables list the most recent Average Daily Traffic (ADT) volumes on Primary and major Secondary roads in the Plan area:

PRIMARY ROUTES - TRAFFIC VOLUME HISTORY

Upper Swift Creek Plan Area
Updated: May 2005

Road	Rte #	Count Located Between	2001	2002	2003	2004	2005
Powwhite Parkway	76	Route 288 and Charter Colony Parkway	-	-	20,461	20,000	-
Route 288	288	Courthouse Road and Hull Street Road	25,704	-	35,701	38,000	-
Route 288	288	Hull Street Road and Powwhite Parkway	26,646	-	34,484	37,000	-
Route 288	288	Powwhite Parkway and Lucks Lane	-	-	-	-	-
Route 288	288	Lucks Lane and Woolridge Road	-	-	-	16,000	-
Route 288	288	Woolridge Road and Midlothian Turnpike	-	-	-	16,000	-
Route 288	288	Midlothian Turnpike and Robious Road	-	-	-	-	-
Route 288	288	Robious Road to James River Bridge	-	-	-	-	35,898
Hull Street Road	360	Appomattox River and Skinquarter Road	-	14,000	18,020	16,000	-
Hull Street Road	360	Skinquarter Road and Woodlake Parkway	-	20,000	22,353	-	-
Hull Street Road	360	Woodlake Parkway and Winterpock Road	44,110	-	44,941	-	-
Hull Street Road	360	Winterpock Road and Old Hundred Road	61,549	-	68,999	-	-
Hull Street Road	360	Old Hundred Road and Route 288	52,491	52,000	-	-	-

Secondary Road Traffic Volumes

Upper Swift Creek Plan Area

Updated: August 2005

Road	Rte #	Count Located Between	2000	2001	2002	2003	2004	2005
Bailey Bridge Rd	654	Claypoint and Schools	8,045	-	11,746	10,819	-	-
Bailey Bridge Rd	654	Schools and Deer Run Drive	5,575	-	-	6,801	-	8,688
Bailey Bridge Rd	654	Deer Run Drive and Spring Run	3,080	-	-	3,453	-	-
Beach Road	655	Winterpock and Coalboro	1,217	-	1,000	1,300	-	-
Beach Road	655	Coalboro and Beaver Bridge	553	-	510	985	-	-
Charter Colony Parkway	754	Miners Trail & Powwhite Pkwy	17,694	-	-	na	-	-
Charter Colony Parkway	754	Powwhite Pkwy and Genito	-	21,572	19,000	21,410	-	-
County Line Road	606	Mount Hermon and Hallsboro	215	-	-	-	-	228
County Line Road	671	Hallsboro & Midlothian Tpke	-	-	-	670	-	-
Duval Road	668	Otterdale and Skinquarter	-	-	-	240	-	-
Genito Road	604	Warbro and Charter Colony Parway	-	-	13,376	-	-	-
Genito Road	604	Charter Colony & Brandermill Pkwy	14,481	-	-	-	-	-
Genito Road	604	Brandermill Pkwy & Woolridge	10,838	-	11,227	13,603	-	-
Genito Road	604	Woolridge and Otterdale	3,759	-	-	5,372	-	4,937
Genito Road	604	Otterdale and Mount Hermon	3,225	-	-	2,390	-	2,947
Genito Road	604	Mount Hermon and Moseley	2,142	-	-	4,483	-	-
Genito Road	604	Moseley and W County Line	-	-	-	1,679	-	-
Hallsboro Road	671	County Line Rd & Mt Hermon	-	-	-	290	-	-
Happy Hill Road	619	Branders Bridge & Harrowgate	2,949	-	3,200	2,648	-	-
Happy Hill Road	619	Harrowgate and S Chester	4,779	-	-	5,106	-	-
Happy Hill Road	619	S Chester and Pheasant Run	3,718	-	-	3,976	-	-
Hensley Road	659	Spring Run and Soccer Complex	-	-	-	950	-	-
Moseley Road	605	Genito and West County Line	466	-	470	440	-	-
Mount Hermon Rd	606	Genito and County Line Road	-	-	-	240	-	-
Mount Hermon Rd	671	County Line Rd & Hallsboro	182	-	-	-	-	207
Mount Hermon Rd	684	Hallsboro and Old Hundred	-	-	-	420	-	-
Old Hundred Rd	652	Dry Bridge and Otterdale	4,662	-	5,802	5,831	-	-
Old Hundred Rd	652	Otterdale & Brandermill Pkwy	5,659	-	6,301	7,067	-	-
Old Hundred Rd	652	Brandermill Pkwy & Powwhite Pkwy	-	-	-	15,605	-	-
Old Hundred Rd	754	Genito and Millridge Parkway	8,391	-	11,135	-	-	-
Old Hundred Rd	754	Millridge Pkwy and Hull Street Rd	13,859	-	-	-	-	-
Otterdale Road	667	Midlothian and Old Hundred	1,356	-	-	1,209	-	1,100
Otterdale Road	667	Old Hundred and Genito	998	-	1,155	1,090	858	-
Otterdale Road	667	Genito and Duval	-	-	-	1,059	-	-
Otterdale Road	667	Duval and Woolridge	-	-	1,100	1,282	906	-
Otterdale Road	667	Woolridge and Hull Street Rd	-	-	1,885	1,855	2,853	-
Spring Run Road	702	Hull Street Road & McEnally	-	-	-	6,495	-	-
Spring Run Road	662	McEnally and Bailey Bridge	-	-	-	4,284	-	7,083
Spring Run Road	654	Bailey Bridge and Hensley	4,293	-	-	4,955	-	-
Winterpock Road	621	Hull Street Road and Bethia	-	-	-	9,154	10,792	-
Winterpock Road	621	Bethia and Beach	7,139	-	-	-	7,886	-
Woolridge Road	668	Otterdale Road to Foxcroft	829	1,094	1,121	1,328	1,553	-
Woolridge Road	668	Timber Bluff Pkwy & Crown Point	8,062	7,942	-	9,806	10,143	10,937
Woolridge Road	668	Crown Point & Genito Road	-	-	-	-	-	10,802

There are several roads in the plan area that have no shoulders, and that currently carry 4,000 or more vehicles per day. To accommodate this existing volume of traffic, these roads should be improved to 24 feet of pavement, with an eight foot paved shoulder, with vertical and horizontal alignments improved as necessary.

The following Table lists Levels of Service on roads in the Plan area, calculated using the most recent available data. Level of Service “E” represents roads that are currently at capacity. Level of Service “F” represents roads carrying traffic volumes that exceed the ideal capacity of the road (also see the attached map).

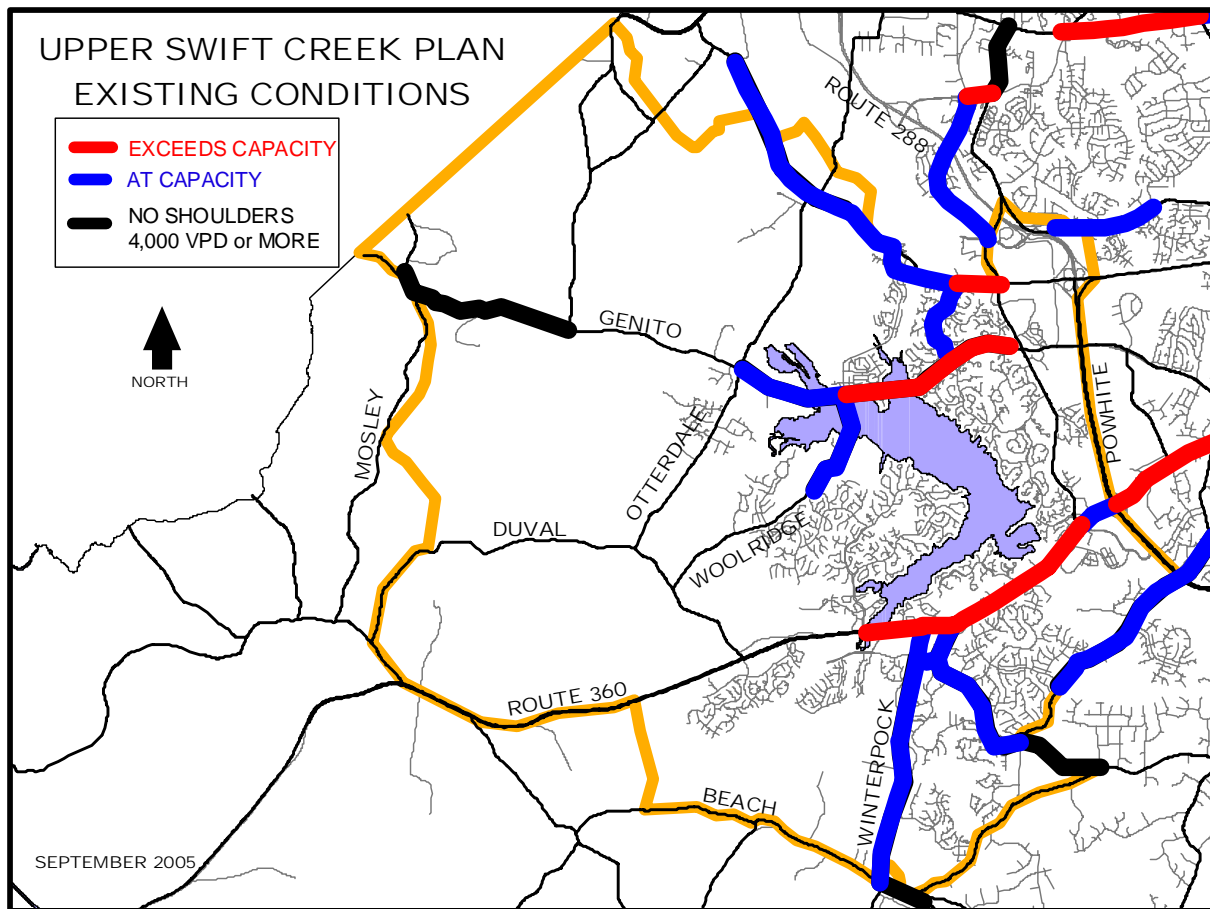
Upper Swift Creek Plan

Primary and Secondary Road Levels of Service

Updated: September 2005

Road Name	Rte #	Count Located Between	# of Lanes	Latest ADT	Level of Service
Powwhite Parkway	76	Route 288 and Charter Colony Pkwy	4	20,461	B
Route 288	288	Courthouse Road and Hull Street Road	4	35,701	B
Route 288	288	Hull Street Road and Powwhite Parkway	4	34,484	B
Hull Street Road	360	Skinquarter Road and Woodlake Pkwy	4	22,353	A
Hull Street Road	360	Woodlake Pkwy and Winterpock Road	4	44,941	F
Hull Street Road	360	Winterpock Road & Old Hundred Road	4	68,999	F
Hull Street Road	360	Old Hundred Road and Route 288	6	52,000	E

Road Name	Rte #	Count Located Between	# of Lanes	Latest ADT	Level of Service
Bailey Bridge Road	654	Claypoint Road & Schools Entrance	2	10,819	E
Bailey Bridge Road	654	Schools Entrance and Deer Run Drive	2	8,688	E
Bailey Bridge Road	654	Deer Run Drive and Spring Run Road	2	3,453	D
Baldwin Creek Road	730	Hull Street Road and Beach Road	2	911	B
Beach Road	655	Riverway Road and Winterpock Road	2	5,460	D
Beach Road	655	Winterpock Road and Coalboro Road	2	1,300	B
Beach Road	655	Coalboro Road & Beaver Bridge Road	2	985	B
Brandermill Pkwy	1921	Genito Road and Powwhite Parkway	2	7,970	E
Charter Colony Pkwy	950	CentrePointe and Powwhite Pkwy	4	17,694	B
Charter Colony Pkwy	950	Powwhite Pkwy and Genito Road	4	21,410	C
County Line Road	606	Mount Hermon Road & Hallsboro Road	2	228	A
County Line Road	671	Hallsboro Road & Midlothian Tpke	2	635	B
Duval Road	668	Otterdale Road & Skinquarter Road	2	240	A
Genito Road	604	Warbro Road & Charter Colony Pkwy	4	13,376	A
Genito Road	604	Charter Colony Pkwy & B'mill Pkwy	2	14,675	F
Genito Road	604	Brandermill Pkwy & Woolridge Road	2	13,603	F
Genito Road	604	Woolridge Road and Otterdale Road	2	4,937	E
Genito Road	604	Otterdale Road & Mount Hermon Road	2	2,947	D
Genito Road	604	Mount Hermon Road & Moseley Road	2	4,483	D
Genito Road	604	Moseley Road and West County Line	2	1,679	C
Hallsboro Road	671	County Line Road & Mt Hermon Road	2	165	A
Hensley Road	659	Spring Run Road and Soccer Complex	2	2,105	C
McEnally Road	702	Winterpock Road & Spring Run Road	2	2,753	E
Moseley Road	605	Genito Road and West County Line	2	440	B
Mount Hermon Rd	606	Genito Road and County Line Road	2	220	B
Mount Hermon Rd	671	County Line Road & Hallsboro Road	2	207	A
Old Hundred Road	652	Dry Bridge Road and Otterdale Road	2	5,831	E
Old Hundred Road	652	Otterdale Road & Brandermill Pkwy	2	7,067	E
Old Hundred Road	754	Brandermill Pkwy & Powwhite Pkwy	2	15,605	F
Old Hundred Road	754	Genito Road and Millridge Pkwy	2	10,373	D



There are several roads in the plan area that are in the State highway system that are currently unimproved/unpaved:

1. Route 796 (Chesterfield Baptist Church on Hull Street Road) – no count available on short unpaved section
2. Ledo Road (Route 795 north of Hull Street Road) – no count available on short unpaved section
3. Lacy Farm Road (Route 729 east of Moseley Road) – 96 vehicles per day in 2005
4. Scottwood Road (Route 670 west of Old Hundred Road) – 71 vehicles per day in 2003

In order to qualify for paving with State funds, these roads must be carrying a daily traffic volume of over 50 vehicles per day. Actual paving of roads that qualify would be dependent on the availability of funding.

The following Table shows the number of reported traffic accidents in the plan area in 2002, 2003, and 2004. Accidents are listed by severity (Fatality/Injury/Property Damage only), and by type.

Traffic Accident Statistics - Reported Crashes

2002, 2003, and 2004

(Accident statistics provided by the Chesterfield County Police Department)

Type of Accident	2002	2003	2004	Totals
Fatality	6	4	5	15
Injury	156	186	209	551
Property Damage Only	588	675	671	1,934
Total reported accidents	750	865	885	2,500

Type of Accident	2002	2003	2004	Totals	Percent
Rearend	283	327	310	920	36.8%
Fixed Object/Off-road	153	173	205	531	21.2%
Angle	145	165	171	481	19.2%
Sideswipe - Same Direction	42	50	56	148	5.9%
Sideswipe - Opposite Direction	30	31	26	87	3.5%
Head-on	3	27	8	38	1.5%
Bike/Pedestrian	3	4	2	9	0.4%
Deer/Other Animal	42	50	36	128	5.1%
Other	49	38	71	158	6.3%
Total reported accidents	750	865	885	2,500	100.0%

The Upper Swift Creek Plan area includes one of the most highly congested road corridors in the County. Drivers on Hull Street Road (State Route 360) between Woodlake Village Parkway and Swift Creek experience extensive travel delays during several hours of the day, and especially during the morning and afternoon rush hours.

Virginia's Surface Transportation Assistance Act (STAA) Truck Routing Map designates Hull Street Road, Route 288, and Powhite Parkway as "Non-Interstate Qualifying Highways". This designation allows oversize vehicles and tandem trailers to use these roadways. Hull Street Road is a major regional east/west truck route. Recent traffic data provided by VDOT indicates that trucks make up approximately 8 percent of the daily traffic volume on Hull Street Road.

The Virginia Department of Transportation (VDOT) Six-Year Improvement Program includes a project to widen Route 360 to six (6) and eight (8) lanes from Winterpock Road to Swift Creek. Widening of the westbound lanes was scheduled to begin in 2005; however, after two advertisements, bids received were too high. Staff hopes the project will be under construction next year. Additional funding for the second phase, widening of the eastbound lanes, is identified in the FY08 and FY 09 years of the current Program. This second phase is included in the recent county bond referendum. The county hopes to accelerate the project and have it under construction by Spring 2006.

Additional projects in the Plan area include:

1. A project to reconstruct two substandard curves on Spring Run Road between McEnally Road and Bailey Bridge Road. Construction is scheduled to begin in Fall 2007.
2. A project to improve two substandard curves on Bailey Bridge Road. The county is managing these projects. Construction is anticipated to begin in Summer 2006.
3. A project to reconstruct Bailey Bridge Road as a two-lane road from Claypoint Road to Manchester High School. The project is not anticipated to begin until Spring 2010.
4. A project to make spot safety improvements on Woolridge Road south of Crown Point. The county was successful in obtaining federal safety funds for this location. Construction is expected to begin in 2008.
5. A project to add a fourth westbound lane on Hull Street Road from Route 288 to Old Hundred Road/Commonwealth Center Parkway. Construction is planned for Spring 2006.

The section of Woolridge Road that crosses the Swift Creek Reservoir is not currently in the State Highway System. This is one of a relatively few major Secondary roads in Chesterfield County that are not maintained by VDOT. Maintenance of this short section of roadway is the responsibility of Chesterfield County.

VDOT assigns a “Sufficiency Rating” to major culvert and bridge structures based on several factors, including structural adequacy, functional obsolescence, and essentiality for public use. If the Sufficiency Rating for a culvert or bridge is less than 80, but more than 50, the structure is eligible for rehabilitation funding. A structure rated less than 50 qualifies for rehabilitation or complete replacement.

Based on information provided by VDOT, four structures in the plan area are rated between 50 and 80:

1. Woodlake Village Parkway (70.0) – over West Branch Creek, north of Village Square Parkway
2. Old Hundred Road (65.0) – over Nuttree Branch, between Brandermill Parkway and Millridge Parkway
3. Otterdale Road (52.1) – over Otterdale Branch, just south of Genito Road
4. Mount Hermon Road (50.7) – over Swift Creek, just south of County Line Road

Two are rated at less than 50:

1. Genito Road (41.6) – easternmost structure over Swift Creek Reservoir
2. Genito Road (29.3) – westernmost structure over Swift Creek Reservoir

In addition, there are several bridges within the plan area that have vehicle weight limits, which restricts their use by heavy truck traffic.

There are two at-grade railroad crossings in the plan area. One crosses County Line Road north of Mount Hermon Road, and one crosses at the intersection of Mount Hermon Road and Hallsboro Road. Railroad crossing gates were recently installed at these crossings.

The County's Bikeway Plan was adopted by the Board of Supervisors in 1989. The purpose of the Bikeway Plan is "to designate a coordinated system of bike facilities to connect County and State parks with other high bike traffic generators such as schools." The *Bikeway Plan* is not intended to designate roads that are appropriate for bicycle travel, but to identify routes where bikeway facilities should be provided in conjunction with future road improvement projects. Several roads in the Upper Swift Creek Plan area are included on the Bikeway Plan. Bike facilities were included in the widening of Genito Road, from Route 360 to Fox Chase Lane, and in the intersection project at Genito Road and Woolridge Road.

Through truck traffic is prohibited from using Old Hundred Road to travel between Midlothian Turnpike and Genito Road, and between Genito Road and Hull Street Road. In order to violate these prohibitions, trucks must travel the entire length of the restricted route without stopping for business purposes. Trucks that have business along these routes are authorized to use the roads.

Table I – Upper Swift Creek Plan - Zoning and Development
 (Note: the study area represents approximately 13% of the county)

Zoning (as of 12/31/05)	Acres	% of total	% of county- wide by zoning category		Developed (as of 12/31/05)	Minimal improvements *	% Minimal improvements *
Agricultural	16,562	47	11		6,506	10,056	61
Residential	16,031	46	19		5,248	10,783	67
Office & Commercial	1,665	5	19		592	1073	64
Industrial	668	2	4		148	520	78
Totals	34,926	100					

Data for zoning compiled from Chesterfield County GIS data for 12/31/05

Note: This data is a reflection of base zoning only and does not factor uses that may be permitted through CUPD (such as commercial uses on residentially zoned property, etc.) Acreages do not include land in rights of way. Data for development compiled from the Chesterfield County Planning Department land use database for 2005 (12/31/05)

*Less than \$1,000 worth of improvements and open water. Acreages do not include land in rights of way.

Table II – Upper Swift Creek Plan - Housing Types and Percentages**(Note: the study area represents approximately 13% of the county)**

Housing Type	Number of units in study area	% of total units in study area	% of units countywide
Single family residences on acreage parcels and in subdivisions	13,209	84	14
Single family residences in mobile home parks	0	0	0
Multi-family residences in apartment complexes, condominiums, and townhouse subdivisions	2,459	16	13
Total	15,668	100	

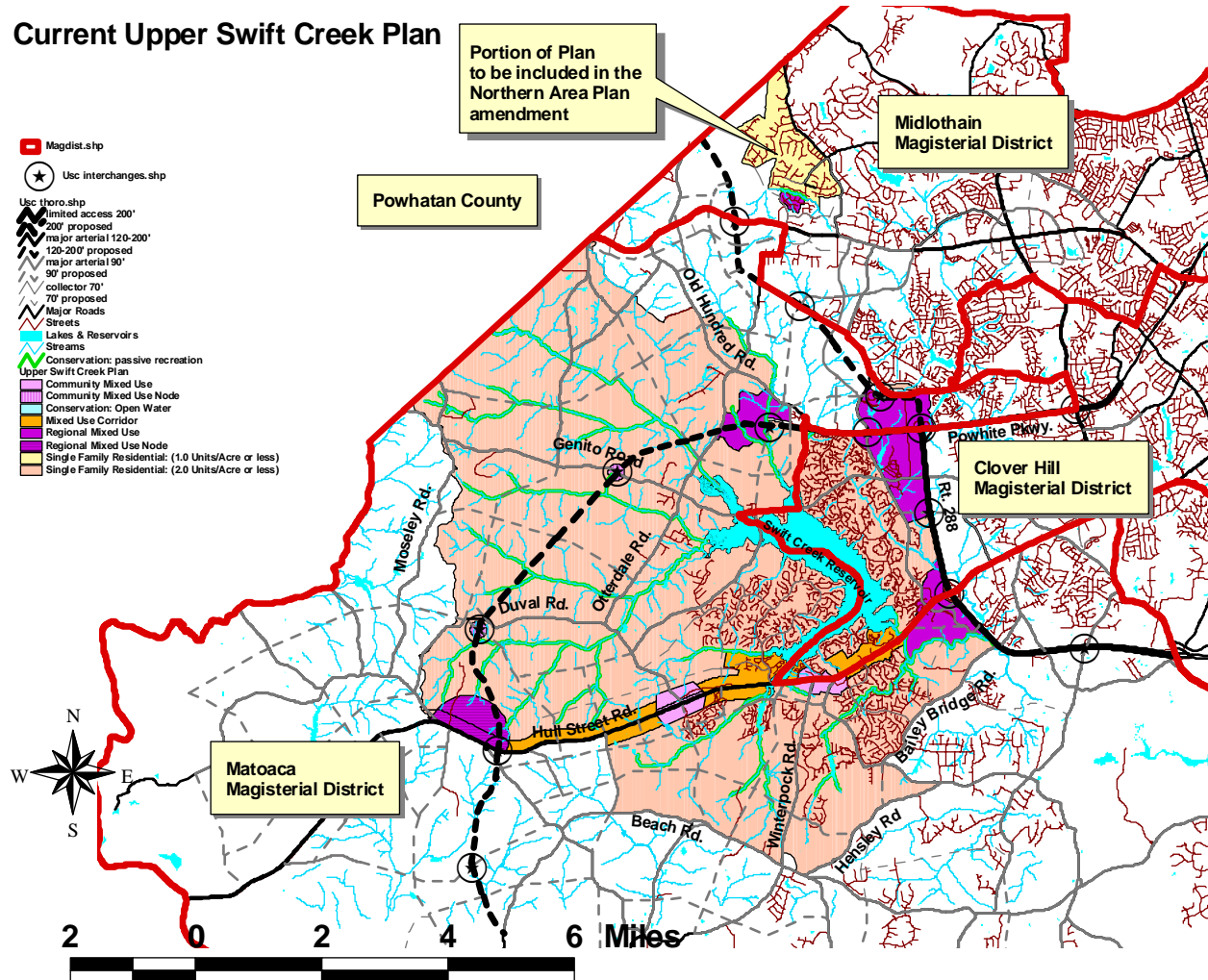
Data compiled from Chesterfield County Planning Department land use database for 2005 (12/31/05)

Table III - Chesterfield County Population Growth, January 1, 1994 to December 31, 2005

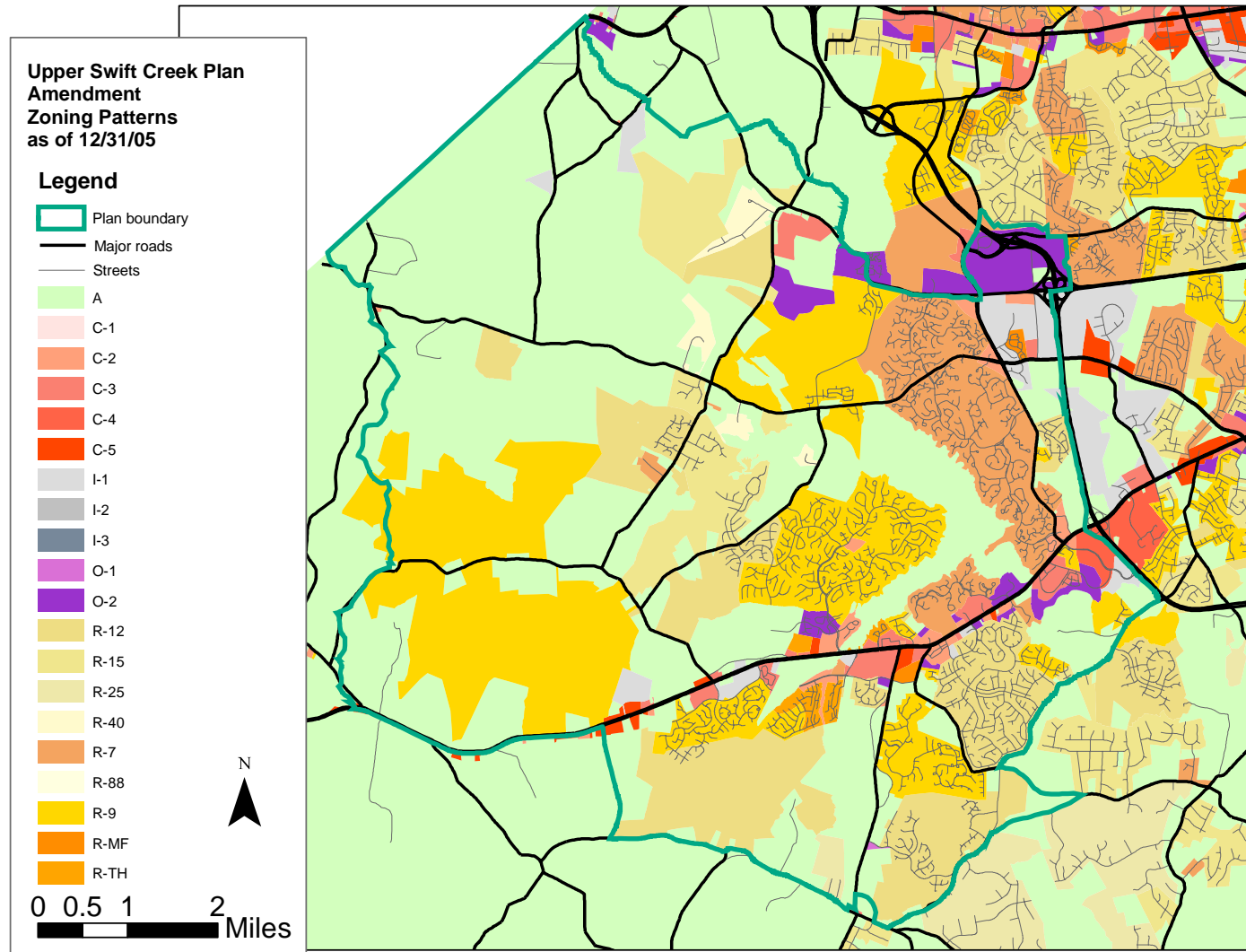
Area	1994	2005	% Increase
Study Area	27,900	40,300	44
Countywide	226,900	299,000	32

Data for population compiled from estimates in the Chesterfield County Planning Department land use database for 2005 (12/31/05).

Map A – Current Upper Swift Creek Plan



Map B – Zoning Pattern (based on county GIS data as of December 31, 2005)



Map C – Land Use Pattern (based on County development potential database as of December 31, 2005)

